IN THE CLAIMS

Please cancel Claims 5-14, without prejudice or disclaimer of the subject matter presented therein.

Please amend Claims 1-4 and 5-28 to read as follows (a complete listing of all the claims appears below):

Claim 1 (currently amended): A direct current motor comprising:

a stator with 2P poles;

a rotor core, including a core of ferromagnetic material having a number slots S ~~slots~~ and a number of teeth S ~~teeth~~ separated from ~~the~~ a stator core by an airgap;

a commutator with a number of segments greater than the number of rotor slots S;

a concentrated winding rotor, having a plurality of simple non-overlapping coils of insulated wire mounted on ~~the~~ a same rotor tooth, with each coil wound around a single tooth only, and with a terminal of each of the coils being connected to different segments of the commutator.

Claim 2 (currently amended): The direct current motor as in claim 1, wherein each pole comprises a permanent magnet mounted on ~~the~~ a surface of a core of a ferromagnetic material.

Claim 3 (original): The direct current motor as in claim 1, wherein each pole

comprises a coil wound around a tooth made of a ferromagnetic material.

Claim 4 (currently amended): An AC commutator (Universal) motor comprising:

a stator with 2P poles, each pole comprising a coil wound around ~~the~~ a tooth of a core of a ferromagnetic material;

a rotor core including a core of ferromagnetic material having a number of slots S ~~slots~~ and a number of teeth S ~~teeth~~ separated from ~~the~~ a stator core by an airgap, the stator and the rotor core comprising a magnetic circuit;

a commutator with a number of segments Z bigger than the number of rotor slots S;

a concentrated winding rotor having a plurality of simple non-overlapping coils of insulated wire mounted on ~~the~~ a same rotor tooth, with each coil wound around a single tooth only, and with a terminal of each of the coils being connected to different segments of the commutator.

Claims 5-14 (canceled)

Claim 15 (currently amended): A direct current motor as claimed in claim 1, with part of a magnetic circuit realized with a soft magnetic composite made of metal powder.

Claim 16 (currently amended): A direct current motor as claimed in claim 15,

wherein the stator comprises teeth and ~~the~~ a center part of each ~~of the~~ rotor tooth or each stator ~~teeth~~ tooth under the coils has a rounded, oval, or circular profile, ~~whereby~~ to reduce ~~the~~ a risk of destruction of ~~the~~ insulation by a sharp bending of ~~the winding~~ windings of the coils, and to maximize ~~the~~ a copper filling factor.

Claim 17 (currently amended): A direct current motor as claimed in claim 15, wherein:

~~the~~ an axial ~~lengths~~ length of ~~the~~ a center part of ~~the~~ teeth under the coils ~~and the~~ is same as an axial length of a yoke ~~are the same~~; and

~~the~~ an axial length of ~~the~~ tooth tips is higher than ~~the~~ an axial length of the teeth.

Claim 18 (currently amended): A direct current motor as claimed in claim 17, wherein ~~the~~ end-windings are inserted partially or completely under the tooth tips.

Claim 19 (currently amended): A direct current motor as claimed in claim 17, wherein the commutator and brushes are partially or completely inserted under the ~~rotor~~ tooth tips to reduce ~~the~~ a total axial length of the motor.

Claim 20 (currently amended): A direct current motor as claimed in claim 15, wherein the teeth are not skewed and some tooth tips are skewed to reduce ~~the~~ variations ~~of the~~ magnetic reluctance or ~~the~~ a cogging torque.

Claim 21 (original): An AC commutator (Universal) motor as claimed in claim 4, wherein a part of magnetic circuit is realized with a soft magnetic composite made of metal powder.

Claim 22 (currently amended): An AC commutator (Universal) motor as claimed in claim 21, wherein ~~the~~ a center part of ~~the~~ each rotor tooth or each stator ~~teeth~~ tooth under the coils ~~have~~ has a rounded, oval, or circular profile ~~whereby to get a reduction of the~~, to reduce a risk of destruction of ~~the~~ insulation by a sharp bending of ~~the winding~~ windings of the coils, and to maximize ~~the~~ a copper filling factor.

Claim 23 (currently amended): An AC commutator (Universal) motor as claimed in claim 21, wherein:

~~the~~ an axial ~~lengths~~ length of ~~the~~ a center part of ~~the~~ teeth under the coils ~~and the~~ is same as an axial length of a yoke ~~are the same~~; and

~~the~~ an axial length of ~~the~~ tooth tips is ~~higher~~ longer than ~~the~~ an axial length of the teeth.

Claim 24 (currently amended): An AC commutator (Universal) motor as claimed in claim 23, wherein ~~the~~ end-windings are inserted partially or completely under the tooth tips.

Claim 25 (currently amended) An AC commutator (Universal) motor as claimed

in claim 23, wherein the commutator and brushes are partially or completely inserted under the ~~rotor~~ tooth tips to reduce ~~the~~ a total axial length of the motor.

Claim 26 (currently amended): An AC commutator (Universal) motor as claimed in claim 21, wherein the teeth are not skewed and some tooth tips are skewed to reduce ~~the~~ variations ~~of the~~ magnetic reluctance or ~~the~~ a cogging torque.

Claim 27 (currently amended): The direct current motor as in claim 1, wherein a plurality of equalizer connections are added on the commutator to reduce ~~the~~ a number of brushes.

Claim 28 (currently amended): An AC commutator (Universal) motor as in claim 4, wherein a plurality of equalizer connections are added on the commutator to reduce ~~the~~ a number of brushes.